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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/566,708

03/01/2006

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EXAMINER

MCGRAW, TREVOR EDWIN

ART UNIT

PAPER NUMBER

3752

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/566,708

Applicant(s)

HELIE ET AL.

Examiner

Trevor McGraw

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Arguments

Rejection under 35 USC § 102

Applicant's arguments with respect to the "insert" as recited in claims 1 and 2 of the present application have been considered but are moot in view of the new ground(s) of rejection in view of the Garrigou (US 3,625,437) that changes "insert (9)" as indicated in Office Action mailed 10/06/2006 to "insert (2)" keeping in better accordance with the disclosure of Garrigou that overtly teaches where the spray head for a pressurized container comprises an insert (2) that forms an internal nozzle that is centered thus, making Applicant's arguments irrelevant and unfounded. Applicant is directed to Column 3, line 31—Column 4, line 43 with emphasis on lines 42-55 of Column 3 of Garrigou (US 3,625,437) (see also International Search Report of PCT/FR2004/002006).

Rejection under 35 USC § 103

Applicant's arguments filed 01/08/2007 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Garrigou discloses an external nozzle 2 and, therefore, does not provide any teaching or suggestion for avoiding the risk of the spraying nozzle being expelled during use. See also pages 9-11 of arguments) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26

USPQ2d 1057 (Fed. Cir. 1993). At the same time, nowhere in Garrigou does it state that the nozzle (2) is an external nozzle and it can be shown from Figures 1 and 2 that nozzle (2) sits within a recess (6) where the nozzle (2) is centered by fixing elements and it appears that Applicant creates a deficient characteristic that is in fact taught by Garrigou in an attempt to make a persuasive argument to overcome the prior art rejection held under Garrigou in view of Ennis, III. Applicant's arguments in this regard are not persuasive.

Furthermore, Applicant uses erroneous information in viewing Ennis, III. Applicant claims that the expulsion channel (22) does not have any means for centering the spray nozzle or the spray orifice when Examiner never refers to the expulsion channel as "22". Applicant is directed to page 3 of Office Action mailed 10/06/2007 where in line 7 Examiner points to "52" as being the expulsion channel of Ennis, III that unquestionably show, disclose and teach where the expulsion channel "52" has at least three flat surfaces (64) for centering a nozzle (2) such as that taught by Garrigou.

In view of the new grounds of rejection for 102 (b) that changes insert "9" as mentioned in Office Action mailed 10/06/2006 under 35 U.S.C. § 102 (b) to insert "2" in Garrigou (see below), it follows that Examiner must also change insert "9" to insert "2" thus presenting a new grounds of rejection being held under 35 U.S.C. § 103(a) with Garrigou in view of Ennis, III.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 8, 10, 11, 12, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Garrigou (US 3,625,437).

In regard to Claims 1, 8, 10, 11 and 12, Garrigou (3,625,437) teaches a fluid dispenser device that includes a fluid spray head manufactured from a common mold (Column 1, Lines 30-68) where the spray head has an expulsion channel (13) with a spray orifice (14) and a spray profile (15,16,17) are formed in an end wall of the spray head where non radial spray channels (17) are formed to the swirling chamber (Column 3, line 46-55) which opens to a spray chamber (16) that is disposed upstream of the spray orifice (14) where an insert (2) is disposed in the expulsion channel (13) so as to form a cover for the spray profile (15,16,17) where the central axis (X) of the insert (2) is substantially identical to the central axis (Y) of the expulsion channel (13) (Figure 4) and where the expulsion channel (13) further has a centering means (19) for centering the insert (2) within the spray head that is located in the expulsion channel (13) for centering the insert (2) where the centering means (19) is in close proximity to the spray profile (15,16,17).

In regard to Claim 2, 13 and 14, Garrigou also teaches where the centering means (19) has at least one projection (see plurality of centering means 19 in Figure 4) that totals 4 projections which inherently includes more than 3 and less than 3

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projections where the diameter of the inscribed circle (see Figure 4) defined by the projections (19-centering means) is substantially identical to the diameter of the insert (2) where the projections extend from an inside wall of the expulsion channel (13) and abut the insert (2) to substantially align the central axis of the insert with the central axis of the expulsion channel (13).

In regard to Claim 4 and 16, Garrigou further teaches where the accesses of the expulsion channel (13) of the feed channel (17) are formed between the projections (Centering means projections 19-Figure 4).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5-7, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garrigou (US 3,625,437) in view of Ennis, III (US 4,923,448).

In regard to claim 3 and 15, Garrigou as taught and described above teaches the claimed invention except for the expulsion channel (13) having three flat surfaces that are symmetrically arranged about the expulsion channel (13) where the flat surfaces cooperate with the insert (9) to center the insert (9) relative to the expulsion channel (13). Ennis, III (4,923,448) teaches that it is known to have an expulsion channel (52) that includes at least 3 flat surfaces (64) that are symmetrically placed about the

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expulsion channel (13). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flat surfaces (64) of the expulsion channel (52) as taught by Ennis, III to the expulsion channel (13) of Garrigou, in order to provide for a non cylindrical means for centering the insert (9) about the expulsion channel (13) so as to offer better tolerance control in offsetting the insert from the expulsion channel for minimizing the amount of space that a fluid can travel for atomization of spray with directional control through the spray openings.

In regard to claims 5-7, 9, Garrigou as taught above discloses the claimed invention except for the following: a central axis of the insert (9) being offset from the central axis of the expulsion channel (13) by a distance of less than 0.08 mm, and preferably less than 0.03 mm; a spray chamber having a diameter of 1 mm; a spray orifice having a diameter of 0.3 mm; and the standard deviation of the offset between the central axis of the insert relative to the central axis of the expulsion channel being less than 0.05 mm and preferably less than 0.02 mm. It would have been an obvious matter of design choice to offset the central axis of the insert (9) from the central axis of the expulsion channel (13) by a distance of less than 0.08 mm, and preferably less than 0.03 mm as applicant has not disclosed that offsetting the central axis of the insert (9) from the central axis of the expulsion channel (13) by a distance of less than 0.08 mm, and preferably less than 0.03 mm solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the central axis' not being offset from one another where offsetting the central axis' would provide a

benefit that would ensure a spray would be directed past the projections through the expulsion channel.

It would have also been an obvious matter of design choice to provide for a spray chamber having a diameter of 1 mm and a spray orifice having a diameter of 0.3 mm as providing for such dimensions of the spray chamber and spray orifice as claimed are not disclosed by applicant so as to solve any stated problem or is for any particular purpose and appear that the invention would perform equally well if the dimensions of the spray chamber of 1 mm and the spray orifice of 0.3 mm were larger where the sizing of such benefits in atomization of a spray fluid through the restricted opening for directing the fluid.

It would have been a further obvious matter of design choice to provide for a standard deviation of less than 0.05 mm and preferably less than 0.02 mm for the offset between the central axis of the insert relative to the central axis of the expulsion channel since applicant has not disclosed that providing for a standard deviation of less than 0.05 mm and preferably less than 0.02 mm for the offset between the central axis of the insert relative to the central axis of the expulsion channel solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well without an offset between the insert and expulsion channel where offsetting the central axis' would provide a benefit that would ensure a spray would be directed past the projections through the expulsion channel.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kamishita et al. (US 5,064,122), Green (US 3,129,893), .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trevor McGraw whose telephone number is (571) 272-7375. The examiner can normally be reached on Monday-Friday (2nd & 4th Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Trevor McGraw
Art Unit 3752

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